

NATIONAL REVIEW OF THE RECORDING AND CONSERVATION OF THE RARER BRITISH MACRO-MOTHS

PAUL WARING

Joint Nature Conservation Committee, Monkstone Hosue, City Road, Peterborough PE1 1JY.

THERE HAS been no nationally co-ordinated approach to moth recording since 1982, when the moth recording scheme operated by the Biological Records Centre (BRC) at the Institute of Terrestrial Ecology, Monks Wood, closed down following the retirement of the scheme organiser, John Heath. In spite of this the level of moth recording has increased greatly. Hundreds of the original contributors to the BRC scheme are still recording and their ranks have been swelled by a much larger number of moth-trappers who have taken up the interest or developed proficiency since the 1970s. In the absence of a national recording scheme, local and country-based initiatives have proliferated, sometimes organised by private individuals often based on a local natural history society, local recording centre or county naturalists' trust.

Light traps are also operated on over sixty reserves belonging to the Royal society for the Protection of Birds (RSPB) and by the staff of other conservation organisations on nature reserves and elsewhere. In addition the Rothamsted Insect Survey, with nearly one hundred light traps throughout Britain, has continued monitoring moth populations since the 1960s. The result is that a huge amount of data on moths is being collected annually. In some counties this has been marshalled into recent county lists. In other counties the information is simply filed as and when it is sent in. For a recent overview of the national status, distribution, habits and habitats of the macro-moths, we must turn to Bernard Skinner's excellent Identification Guide (Skinner, 1984) which provides a brief and general summary for each species. Heath and Emmet (1976 onwards) will provide greater detail and distribution maps but this work will not be completed for some years and the early volumes are already more than ten years old.

For various reasons it has not been possible to revive the national BRC moth recording scheme to date. Meanwhile the demand for up-to-date information on moth distribution continues, particularly in conservation circles. A great deal of money and staff time is now being spent on defending and managing nature reserves and other places to benefit wildlife and moths, butterflies and other invertebrate groups are being recognised as valuable indicators of the condition of habitats and of the consequences of different types of management, with the result that information is regularly sought from us.

In January 1991 a National Review of the recording and conservation of the rarer British macro-moths was launched by the Nature Conservancy Council (NCC), with the co-operation of BRC, to collate existing information and the results of current moth recording efforts to enable

more effective use of these data for conservation purposes. I shall be in charge of this project as part of my duties in JNCC's species conservation branch and funding for the project currently exists until March 1992.

It is clear from visits to local recording centres and county recorders that moth records outnumber those of any other invertebrate group. To marshal the potentially overwhelming amount of available data in the time available the aims and products of this Review have been defined in very precise terms and are as follows:

1. To prepare and circulate an up-to-date address list of county moth recorders and biological records centres so that a moth worker operating anywhere in Britain knows where to send records. This directory and notes in relevant journals will be used to promote all existing county-based recording initiatives.
2. To link all county recorders and local biological records centres into a national moth recording network to handle the data in the following way:
 - a. Moth workers (i.e. light trap operators, hunters of larvae or anyone who regularly records moths) to be encouraged to send all moth records and correspondence in, on a county basis to the relevant county moth recorders and the entomological press. The county recorder will check incoming information for unusual or odd records, confirm them where necessary and process them in his or her usual way. A number of independent observers will be asked to comment on the network and its operations and products as a further check on quality.
 - b. Biological records centres not already in touch with county recorders have been asked to make contact to inform them of the extent of their activities, any facilities they can offer and records they hold.
 - c. The national review will identify and concentrate on macro-moth species which are known from less than 100 of the 10km grid squares in Britain (which is less than 3% of the grid squares). County moth recorders and biological records centres have been circulated with a provisional list of such nationally scarce species (based on Hadley 1984) and have been asked to forward only records of these species to me, together with suggestions of any other species they would like to see considered for inclusion. The list comprises just over 250 species.
 - d. The network will be used to review and revise the above short list based on the number of post-1979 records known to the county recorders. Existing gradings into Red Data Book (Shirt 1987) and National Notable categories will be tested and adjusted if necessary. Other categories for moths which tend to be restricted to particular habitats may be introduced at a later date.

Products of the review will be:

1. Up-to-date directory of county moth recorders and local biological records centres.
2. Up-to-date distribution maps of the nationally scarce species, showing 1980s records on a 10km square basis.
3. A revised list of Red Data Book and Nationally Notable species, defined on the basis of (1) above.
4. An up-to-date inventory of all other 1980s records of RDB and notable species on existing ISR sites. It will be possible to arrange and print out this information by site or by species.
5. A booklet detailing the Red Data Book and Notable species present on National Nature Reserves.
6. A data sheet per species including statements on habitat requirements and conservation needs as far as is known.

Provision exists for dealing with any records which a moth recorder may need to submit in confidence. Such records can be labelled on the computer database so that they do not print out and can be omitted from the distribution maps or "moved" into a nearby 10km square.

All the county recorders and I would be most grateful if lepidopterists who have recorded macro-moths in the 1980s could send in their records to us if they have not already done so. (Note that, in principle, any records previously sent to any NCC office should be reaching me via our regional staff and any records sent to the Rothamsted Insect Survey or the Biological Records Centre at Monks wood will be passed to me and do not need to be sent in again.) A provisional version of the directory of addresses of county recorders and local records centres and a provisional list of the Red Data Book and Notable macro-moths are now available to all interested in moths. For these please send a self-addressed A4 sized envelope bearing a 41p stamp to me at the JNCC, Monkstone House, Peterborough PE1 1JY. Moth records are best sent direct to the relevant county recorder. If you have records from many counties and do not wish to send them separately then send them all direct to me and I shall forward them. If your records are very extensive and there is no chance of getting them all sent off by mid summer 1991, I would be grateful if you could extract the top priority records i.e. 1980 - 1990 records of the provisional RDB and Nationally Notable species, and send them direct to me. The format for all records should be:

Species, vice-county or modern county, site name, six figure grid reference, reference of 10km square, date of record, numbers seen, recorder, identifier if different, reference if published e.g.: *Plagodis pulveraria*, Oxon v.c.23, Waterperry Wood, SP607095, SP60, 1984, 1985 and 1986. Several including larvae on hazel (*Corylus avellana*), P. Waring, see Waring P. 1988. Hazel as an important larval foodplant of the Barred Umber *Plagodis pulveraria* (Lep.: Geometridae), *Entomologist's Rec. J. Var.* **100**: 135-136.

Draft non-confidential versions of distribution maps, the guide to moths on NCC reserves and data sheets will be issued to all county moth recorders and records centres in February 1992 in whatever state they have reached, and will be available on request to any other contributor of records. News concerning the progress of the Review between now and February 1992 will appear in circulars to county recorders and via the *Entomologist's Record* and *British Wildlife* magazine.

Acknowledgements

I would like to thank all those who have been associated with the Invertebrate Site Register (ISR), in particular Alan Stubbs and Ian McLean for their foresight and planning in setting up the ISR and for keeping it running over the last decade, often in difficult circumstances. Special thanks are due to Stuart Ball for assembling and developing the software which allows us to file, sort, retrieve and map records of invertebrates in an efficient manner. I would also like to thank all the recorders and records centres who have agreed to support the Review and who are working, often in their spare time, to process the records, and all the moth recorders for their support of John Heath's scheme and for their patience in transferring and adjusting to this new scheme. Thanks in advance to all lepidopterists who decide to support this Review. The success of the project will ultimately depend on your thoroughness and speed in replying to our requests for 1980s records and it cannot take place without you.

References

- Hadley, J., 1984. *A national review of British macrolepidoptera*. Nature Conservancy Council (Invertebrate Site Register, unpublished report 46).
Heath, J., Emmet, A.M. et. al., 1976 onwards. *The moths and butterflies of Great Britain and Ireland*, Vols. 1, 2, 7, 9, 10 (others to be published).
Shirt, D.B. (ed.), 1987. *British Red Data Books: 2*. Insects. Nature Conservancy Council, Peterborough.
Skinner, B., 1984. *Colour identification guide to moths of the British Isles*. Viking. Harmondsworth, Middlesex.

Sparganothis pilleriana D. & S. (Lep.: Tortricidae) in North Wales

Except for an old record from Glamorgan v.c.41 pre 1905, this species is found in the southern counties of England. I have seen a pale species of Tortricid several times near Llandudno v.c.49 and eventually took this species on the Great Orme (SH7583) on 29.vi.90. The larva is polyphagous on various plants and is injurious to grape vines in Europe. *Clematis vitalba* was growing near where the moth was found and may be the local foodplant.— H.N. MICHAELIS, 5 Glan-y-Mor, Glan Conwy, Colwyn Bay LL28 5TA.